Docket No. 2001-1446 Appln. No. 10/579,753

AMENDMENTS TO THE SPECIFICATION:

Page 1, before line 5, insert the following headings: --BACKGROUND OF THE INVENTION

Field of the Invention--

Page 1, replace the paragraph beginning on line 5 with the following amended paragraph:

--The invention relates to a method of supplying oil from a first floating structure to an offloading structure, comprising the steps of:

providing a flexible duct extending between the two structures at a water depth of between 50m and 500m, the duct comprising a flexible elastomeric material and having an internal diameter of at least 600 mm and a length of between $1500 \, 1,500 \,$ and $3000 \, 3,000 \,$ m, and providing at least one pump at the first structure and pumping the oil through the duct at a pressure between 5 bar and 30 bar and at a flow rate between $1000 \, 1,000 \,$ and $1000 \, 1000 \,$ m3/hr $1000 \,$ m3

Page 1, between lines 12 and 13, insert the following heading:

-- Description of the Related Art--

Page 1, between lines 28 and 29, insert the following heading:

--BRIEF SUMMARY OF THE INVENTION--

Page 2, between lines 26 and 27, insert the following heading:

--BRIEF DESCRIPTION OF THE DRAWING FIGURES--

Page 3, before line 1, insert the following heading: --DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS--

Page 3, replace the paragraphs beginning on line 12 and ending on page 4, line 6 with the following amended paragraphs:

--Fig. 2a shows a simple catenary configuration of the flexible hose 1, Fig. 2b a wave configuration, Fig. 2c a hybrid configuration with tensioning weights 16,17 16 and Fig. 2d a tethered configuration, in which the hose 1 is connected to the sea bed 17 via tethers 18.

Hydrocarbons, such as crude oil, are supplied to the offloading buoy 3 at a rate of for instance 50.000 50,000 barrels per hour and a pumping pressure of pump 13 of 18 bar. In the duct, the oil temperature may be 40° C and its viscosity will be about 40 cP. The water temperature at a depth of 200 m will be about $\frac{140^{\circ}}{6}$ C. The temperature isolation of the flexible hose [[3]] 1, which may be formed of rubber, such as described in WO 02/44607, which application is incorporated herein by reference, is such that the temperature difference between the outlet temperature T_{0} of the crude oil at the buoy 3 and the inlet temperature T_{10} of the oil at the floating structure 12 is not more than 15° C, preferably lower than 5° C. The inlet temperature T_{10} may be between 30° C and 70° C. The reduced heat loss results in

a substantially constant viscosity over the length of the hose [[3]] 1 and hence in improved hydrocarbon flow.

As is shown in Figs. 2a-2d, each time a single flexible hose [[3]] $\underline{1}$ extends from the first floating structure 12 to the offloading buoy 3. Multiple offloading buoys 3 may be used, at different distances from the floating structure, each time a single large-diameter flexible hose according to the present invention extending from the floating structure to a respective offloading buoy.

As is shown in Fig. 3, the hose [[3]] 1 may comprise an outer layer 20 of insulating rubber or polystyrene, of a thickness of at least 2 cm. Preferably the layer 20 is a buoyant material. The hose [[2]] 1 has a wall 21 for instance of steel-reinforced rubber of wall thickness of between 0.5 cm and 1.5 cm. The inner surface of the wall 21 may be provided with a liner of reduced friction characteristics, such as a liner of Nitrile material. The internal diameter Di of the hose [[3]] 1 is between 500 mm and 800 mm, the external diameter De of the inner hose part is between 100 mm and 200 mm and the outer diameter D0 is between 600 mm and 1000 mm.--